

Fort Cherry Watersheds

Our school district lies within 2 watersheds: Raccoon Creek and Chartiers Creek. Today you will be constructing a model land surface to explore basic concepts about watersheds including

- How the boundaries of watersheds are determined
- How water flows in the watershed
- How water quality is affected by other parts of the watershed

Directions to build your watersheds:

1. **Map the rivers, lakes, and streams:** On the map provided, locate and highlight the following bodies of water
 - Cherry Run
 - Raccoon Creek
 - Millers Run
 - Robinsons Run
 - Chartiers Run
 - Chartiers Creek
2. **Make a model of the shape of the land:** Arrange crumpled newspaper in the aluminum tray to represent the shape of the landscape in the location of your map. This is a model of a landscape with hills, valleys, and connections between them.
3. **Add the surface of the land to your model:** Place the tray and newspaper inside the plastic bag. In this model, the plastic represents the surface of the land. Adjust the shape of the bag to match the shape of the land surface that you need so that rivers flow as they do on your map.
4. **Draw the waterways on your model:** Think about rain falling in your model watershed. Where would the rainwater go? Where would rivers and streams form? Would there be any waterfalls? Where will the water form lakes or ponds? Draw the locations where you think rivers and lakes would form with a permanent marker.
5. **Draw the boundary of a watershed on your model:** Using a different color of permanent marker, draw the boundary of the watersheds in your model. Mark a spot for your school. Draw other landmarks you know.
6. **It's time for some rain!** Use the spray bottle to 'rain' on the top of your highest 'mountain.' Continue raining until the water forms streams, rivers, and lakes.
7. **Pollution:** How did the pollution added to just one area of your watershed model impact the lakes, streams, and rivers?
8. **Field trip:** Take a look at the model watersheds built by other groups. What differences in the shape of the land do you notice? How do these differences affect the waterways?
9. **Evaluation:** How is this model like a real landscape? How is this model different from a real landscape? What are the limitations of the model? What changes would you make to improve your model?
10. **Clean up:** Throw away the garbage bag, recycle the newspaper, and return the aluminum pan, markers, and any other supplies.